



0580
4/16

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/098,600
Source: OIPB
Date Processed by STIC: 4/8/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

OIPE

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/098;600

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 ✓ Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



Does Not Comply
Corrected Diskette Needed
 Error on p. 145

OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/098,600

DATE: 04/08/2002
 TIME: 12:59:52

Input Set : A:\EP.txt
 Output Set: N:\CRF3\04082002\J098600.raw

4 <110> APPLICANT: Messier, Walter
 5 Sikela, James M
 7 <120> TITLE OF INVENTION: Methods to Identify Polynucleotide and Polypeptide
 8 Sequences Which May Be Associated with Physiological
 9 and Medical Conditions
 11 <130> FILE REFERENCE: GENO2002CIP2
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/098,600
 C--> 14 <141> CURRENT FILING DATE: 2002-03-14
 16 <150> PRIOR APPLICATION NUMBER: 09/942,252
 17 <151> PRIOR FILING DATE: 2001-08-28
 19 <150> PRIOR APPLICATION NUMBER: 09/591,435
 20 <151> PRIOR FILING DATE: 2000-06-09
 22 <150> PRIOR APPLICATION NUMBER: 09/240,915
 23 <151> PRIOR FILING DATE: 1999-01-29
 25 <150> PRIOR APPLICATION NUMBER: 60/073,263
 26 <151> PRIOR FILING DATE: 1998-01-30
 28 <150> PRIOR APPLICATION NUMBER: 60/098,987
 29 <151> PRIOR FILING DATE: 1998-09-02
 E--> 31 <160> NUMBER OF SEQ ID NOS: 33
 33 <170> SOFTWARE: PatentIn Ver. 2.0

ERRORED SEQUENCES

557 <210> SEQ ID NO: 7
 558 <211> LENGTH: 254
 delete 559 <212> TYPE: PRT
 E--> 560 <213> Homo sapiens
 W--> 563 <213> ORGANISM: Homo sapiens
 563 <400> SEQUENCE: 7
 564 Ser Asp Glu Lys Val Phe Glu Val His Val Arg Pro Lys Lys Leu Ala
 565 1 5 10 15
 567 Val Glu Pro Lys Gly Ser Leu Glu Val Asn Cys Ser Thr Thr Cys Asn
 568 20 25 30
 570 Gln Pro Glu Val Gly Gly Leu Glu Thr Ser Leu Asp Lys Ile Leu Leu
 571 35 40 45
 573 Asp Glu Gln Ala Gln Trp Lys His Tyr Leu Val Ser Asn Ile Ser His
 574 50 55 60
 576 Asp Thr Val Leu Gln Cys His Phe Thr Cys Ser Gly Lys Gln Glu Ser
 577 65 70 75 80
 579 Met Asn Ser Asn Val Ser Val Tyr Gln Pro Pro Arg Gln Val Ile Leu
 580 85 90 95
 582 Thr Leu Gln Pro Thr Leu Val Ala Val Gly Lys Ser Phe Thr Ile Glu

RAW SEQUENCE LISTING

DATE: 04/08/2002

PATENT APPLICATION: US/10/098,600

TIME: 12:59:53

Input Set : A:\EP.txt

Output Set: N:\CRF3\04082002\J098600.raw

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585 Cys Arg Val Pro Thr Val Glu Pro Leu Asp Ser Leu Thr Leu Phe Leu
586          115          120          125
588 Phe Arg Gly Asn Glu Thr Leu His Tyr Glu Thr Phe Gly Lys Ala Ala
589          130          135          140
591 Pro Ala Pro Gln Glu Ala Thr Ala Thr Phe Asn Ser Thr Ala Asp Arg
592 145          150          155          160
594 Glu Asp Gly His Arg Asn Phe Ser Cys Leu Ala Val Leu Asp Leu Met
595          165          170          175
597 Ser Arg Gly Gly Asn Ile Phe His Lys His Ser Ala Pro Lys Met Leu
598          180          185          190
600 Glu Ile Tyr Glu Pro Val Ser Asp Ser Gln Met Val Ile Ile Val Thr
601          195          200          205
603 Val Val Ser Val Leu Leu Ser Leu Phe Val Thr Ser Val Leu Leu Cys
604          210          215          220
606 Phe Ile Phe Gly Gln His Leu Arg Gln Gln Arg Met Gly Thr Tyr Gly
607 225          230          235          240
609 Val Arg Ala Ala Trp Arg Arg Leu Pro Gln Ala Phe Arg Pro
610          245          250
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1474 <212> TYPE: PRT
1475 <213> ORGANISM: Homo sapiens
1477 <400> SEQUENCE: 16
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1482          20          25          30
1484 Leu Val Met Glu Phe Cys Pro Leu Gly Asp Leu Lys Gly Tyr Leu Arg
1485          35          40          45
1487 Ser Cys Arg Val Ala Glu Ser Met Ala Pro Asp Pro Arg Thr Leu Gln
1488          50          55          60
1490 Arg Met Ala Cys Glu Val Ala Cys Gly Val Leu His Leu His Arg Asn
1491 65          70          75          80
1493 Asn Phe Val His Ser Asp Leu Ala Leu Arg Asn Cys Leu Leu Thr Ala
1494          85          90          95
1496 Asp Leu Thr Val Lys Ile Gly Asp Tyr Gly Leu Ala His Cys Lys Tyr
1497          100          105          110
1499 Arg Glu Asp Tyr Phe Val Thr Ala Asp Gln Leu Trp Val Pro Leu Arg
1500          115          120          125
1502 Trp Ile Ala Pro Glu Leu Val Asp Glu Val His Ser Asn Leu Leu Val
1503          130          135          140
1505 Val Asp Gln Thr Lys Ser Gly Asn Val Trp Ser Leu Gly Val Thr Ile
1506 145          150          155          160
1508 Trp Glu Leu Phe Glu Leu Gly Thr Gln Pro Tyr Pro Gln His Ser Asp
1509          165          170          175
1511 Gln Gln Val Leu Ala Tyr Thr Val Arg Glu Gln Gln Leu Lys Leu Pro
1512          180          185          190
1514 Lys Pro Gln Leu Gln Leu Thr Leu Ser Asp Arg Trp Tyr Glu Val Met

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RAW SEQUENCE LISTING

DATE: 04/08/2002

PATENT APPLICATION: US/10/098,600

TIME: 12:59:53

Input Set : A:\EP.txt

Output Set: N:\CRF3\04082002\J098600.raw

1515		195		200		205													
1517	Gln	Phe	Cys	Trp	Leu	Gln	Pro	Glu	Gln	Arg	Pro	Thr	Ala	Glu	Glu	Val			
1518		210					215					220							
1520	His	Leu	Leu	Leu	Ser	Tyr	Leu	Cys	Ala	Lys	Gly	Ala	Thr	Glu	Ala	Glu			
1521	225					230					235					240			
1523	Glu	Glu	Phe	Glu	Arg	Arg	Trp	Arg	Ser	Leu	Arg	Pro	Gly	Gly	Gly	Gly			
1524				245				250						255					
1526	Val	Gly	Pro	Gly	Pro	Gly	Ala	Ala	Gly	Pro	Met	Leu	Gly	Gly	Val	Val			
1527				260				265						270					
1529	Glu	Leu	Ala	Ala	Ala	Ser	Ser	Phe	Pro	Leu	Leu	Glu	Gln	Phe	Ala	Gly			
1530		275						280					285						
1532	Asp	Gly	Phe	His	Ala	Asp	Gly	Asp	Asp	Val	Leu	Thr	Val	Thr	Glu	Thr			
1533		290					295					300							
1535	Ser	Arg	Gly	Leu	Asn	Phe	Glu	Tyr	Lys	Trp	Glu	Ala	Gly	Arg	Gly	Ala			
1536	305					310					315					320			
1538	Glu	Ala	Phe	Pro	Ala	Thr	Leu	Ser	Pro	Gly	Arg	Thr	Ala	Arg	Leu	Gln			
1539				325					330						335				
1541	Glu	Leu	Cys	Ala	Pro	Asp	Gly	Ala	Pro	Pro	Gly	Val	Val	Pro	Val	Leu			
1542			340					345					350						
1544	Ser	Ala	His	Ser	Pro	Ser	Leu	Gly	Ser	Glu	Tyr	Phe	Ile	Arg	Leu	Glu			
1545		355					360					365							
1547	Glu	Ala	Ala	Pro	Ala	Ala	Gly	His	Asp	Pro	Asp	Cys	Ala	Gly	Cys	Ala			
1548		370					375					380							
1550	Pro	Ser	Pro	Pro	Ala	Thr	Ala	Asp	Gln	Asp	Asp	Asp	Ser	Asp	Gly	Ser			
1551	385					390					395					400			
1553	Thr	Ala	Ala	Ser	Leu	Ala	Met	Glu	Pro	Leu	Leu	Gly	His	Gly	Pro	Pro			
1554				405					410						415				
1556	Val	Asp	Val	Pro	Trp	Gly	Arg	Gly	Asp	His	Tyr	Pro	Arg	Arg	Ser	Leu			
1557			420					425					430						
1559	Ala	Arg	Asp	Pro	Leu	Cys	Pro	Ser	Arg	Ser	Pro	Ser	Pro	Ser	Ala	Gly			
1560			435					440					445						
1562	Pro	Leu	Ser	Leu	Ala	Glu	Gly	Gly	Ala	Glu	Asp	Ala	Asp	Trp	Gly	Val			
1563		450					455					460							
1565	Ala	Ala	Phe	Cys	Pro	Ala	Phe	Phe	Glu	Asp	Pro	Leu	Gly	Thr	Ser	Pro			
1566	465					470					475					480			
1568	Leu	Gly	Ser	Ser	Gly	Ala	Pro	Pro	Leu	Pro	Leu	Thr	Gly	Glu	Asp	Glu			
1569				485					490						495				
1571	Leu	Glu	Glu	Val	Gly	Ala	Arg	Arg	Ala	Ala	Gln	Arg	Gly	His	Trp	Arg			
1572				500					505					510					
1574	Ser	Asn	Val	Ser	Ala	Asn	Asn	Asn	Ser	Gly	Ser	Arg	Cys	Pro	Glu	Ser			
1575		515						520					525						
1577	Trp	Asp	Pro	Val	Ser	Ala	Gly	Cys	His	Ala	Glu	Gly	Cys	Pro	Ser	Pro			
1578		530					535						540						
1580	Lys	Gln	Thr	Pro	Arg	Ala	Ser	Pro	Glu	Pro	Gly	Tyr	Pro	Gly	Glu	Pro			
1581	545					550					555					560			
1583	Leu	Leu	Gly	Leu	Gln	Ala	Ala	Ser	Ala	Gln	Glu	Pro	Gly	Cys	Cys	Pro			
1584				565					570						575				
1586	Gly	Leu	Pro	His	Leu	Cys	Ser	Ala	Gln	Gly	Leu	Ala	Pro	Ala	Pro	Cys			
1587				580					585					590					

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/098,600

DATE: 04/08/2002

TIME: 12:59:53

Input Set : A:\EP.txt

Output Set: N:\CRF3\04082002\J098600.raw

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1589 Leu Val Thr Pro Ser Trp Thr Glu Thr Ala Ser Ser Gly Gly Asp His
1590      595      600      605
1592 Pro Gln Ala Glu Pro Lys Leu Ala Thr Glu Ala Glu Gly Thr Thr Gly
1593      610      615      620
1595 Pro Arg Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Gln Glu Gly Ala
1596 625      630      635      640
1598 Pro Leu Pro Ser Glu Glu Ala Ser Ala Pro Asp Ala Pro Asp Ala Leu
1599      645      650      655
1601 Pro Asp Ser Pro Thr Pro Ala Thr Gly Gly Glu Val Ser Ala Ile Lys
1602      660      665      670
1604 Leu Ala Ser Ala Leu Asn Gly Ser Ser Ser Ser Pro Glu Val Glu Ala
1605      675      680      685
1607 Pro Ser Ser Glu Asp Glu Asp Thr Ala Glu Ala Thr Ser Gly Ile Phe
1608      690      695      700
1610 Thr Asp Thr Ser Ser Asp Gly Leu Gln Ala Arg Arg Pro Asp Val Val
1611 705      710      715      720
1613 Pro Ala Phe Arg Ser Leu Gln Lys Gln Val Gly Thr Pro Asp Ser Leu
1614      725      730      735
1616 Asp Ser Leu Asp Ile Pro Ser Ser Ala Ser Asp Gly Gly Tyr Glu Val
1617      740      745      750
1619 Phe Ser Pro Ser Ala Thr Gly Pro Ser Gly Gly Gln Pro Arg Ala Leu
1620      755      760      765
1622 Asp Ser Gly Tyr Asp Thr Glu Asn Tyr Glu Ser Pro Glu Phe Val Leu
1623      770      775      780
1625 Lys Glu Ala Gln Glu Gly Cys Glu Pro Gln Ala Phe Ala Glu Leu Ala
1626 785      790      795      800
1628 Ser Glu Gly Glu Gly Pro Gly Pro Glu Thr Arg Leu Ser Thr Ser Leu
1629      805      810      815
1631 Ser Gly Leu Asn Glu Lys Asn Pro Tyr Arg Asp Ser Ala Tyr Phe Ser
1632      820      825      830
1634 Asp Leu Glu Ala Glu Ala Glu Ala Thr Ser Gly Pro Glu Lys Lys Cys
1635      835      840      845
1637 Gly Gly Asp Arg Ala Pro Gly Pro Glu Leu Gly Leu Pro Ser Thr Gly
1638      850      855      860
1640 Gln Pro Ser Glu Gln Val Cys Leu Arg Pro Gly Val Ser Gly Glu Ala
1641 865      870      875      880
1644 Gln Gly Ser Gly Pro Gly Glu Val Leu Pro Pro Leu Leu Gln Leu Glu
1645      885      890      895
1647 Gly Ser Ser Pro Glu Pro Ser Thr Cys Pro Ser Gly Leu Val Pro Glu
1648      900      905      910
1650 Pro Pro Glu Pro Gln Gly Pro Ala Lys Val Arg Pro Gly Pro Ser Pro
1651      915      920      925
1654 Ser Cys Ser Gln Phe Phe Leu Leu Thr Pro Val Pro Leu Arg Ser Glu
1655      930      935      940
1657 Gly Asn Ser Ser Glu Phe Gln Gly Pro Pro Gly Leu Leu Ser Gly Pro
1658 945      950      955      960
1660 Ala Pro Gln Lys Arg Met Gly Gly Pro Gly Thr Pro Arg Ala Pro Leu
1661      965      970      975
1663 Arg Leu Ala Leu Pro Gly Leu Pro Ala Ala Leu Glu Gly Arg Pro Glu

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/098,600

DATE: 04/08/2002

TIME: 12:59:53

Input Set : A:\EP.txt

Output Set: N:\CRF3\04082002\J098600.raw

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1664          980          985          990
1666 Glu Glu Glu Glu Asp Ser Glu Asp Ser Asp Glu Ser Asp Glu Glu Leu
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1669 Arg Cys Tyr Ser Val Gln Glu Pro Ser Glu Asp Ser Glu Glu Glu Ala
1670      1010          1015          1020
1672 Pro Ala Val Pro Val Val Val Ala Glu Ser Gln Ser Ala Arg Asn Leu
E--> 1673 025          1030          1035          1040
1675 Arg Ser Leu Leu Lys Met Pro Ser Leu Leu Ser Glu Thr Phe Cys Glu
1676          1045          1050          1055
1678 Asp Leu Glu Arg Lys Lys Lys Ala Val Ser Phe Phe Asp Asp Val Thr
1679          1060          1065          1070
1681 Val Tyr Leu Phe Asp Gln Glu Ser Pro Thr Arg Glu Leu Gly Glu Pro
1682          1075          1080          1085
1684 Phe Pro Gly Ala Lys Glu Ser Pro Pro Thr Phe Leu Arg Gly Ser Pro
1685      1090          1095          1100
1687 Gly Ser Pro Ser Ala Pro Asn Arg Pro Gln Gln Ala Asp Gly Ser Pro
E--> 1688 105          1110          1115          1120
1690 Asn Gly Ser Thr Ala Glu Glu Gly Gly Gly Phe Ala Trp Asp Asp
1691          1125          1130          1135
1693 Phe Pro Leu Met Thr Ala Lys Ala Ala Phe Ala Met Ala Leu Asp Pro
1694          1140          1145          1150
1696 Ala Ala Pro Ala Pro Ala Ala Pro Thr Pro Thr Pro Ala Pro Phe Ser
1697          1155          1160          1165
1699 Arg Phe Thr Val Ser Pro Ala Pro Thr Ser Arg Phe Ser Ile Thr His
1700      1170          1175          1180
1702 Val Ser Asp Ser Asp Ala Glu Ser Lys Arg Gly Pro Glu Ala Gly Ala
E--> 1703 185          1190          1195          1200
1705 Gly Gly Glu Ser Lys Glu Ala
1706          1205
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2131 <211> LENGTH: 444
2132 <212> TYPE: PRT
2133 <213> ORGANISM: Pan troglodytes
2135 <400> SEQUENCE: 33
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2139 Asn His Phe Gly Gly Lys Arg Leu Ser Leu Leu Tyr Lys Gly Ser Val
2140          20          25          30
2142 His Gly Phe His Asn Gly Val Leu Asp Arg Cys Cys Asn Gln Gly
2143          35          40          45
2145 Pro Thr Leu Thr Val Ile Tyr Ser Glu Asp His Ile Ile Gly Ala Tyr
2146          50          55          60
E--> 2148 Ala Glu Glu Gly Tyr Gln Xaa Arg Lys Tyr Ala Ser Ile Ile Leu Phe
2149      65          70          75          80
2151 Ala Leu Gln Glu Thr Lys Ile Ser Glu Trp Lys Leu Gly Leu Tyr Thr
2152          85          90          95
2154 Pro Glu Thr Leu Phe Cys Cys Asp Val Ala Lys Tyr Asn Ser Pro Thr
2155          100          105          110
2157 Asn Phe Gln Ile Asp Gly Arg Asn Arg Lys Val Ile Met Asp Leu Lys

```

Please line up
amino acid numbering
so that the first
digit is directly under
neath the first letter
of the first amino
acid in each line.

Xaa detected. Must provide
Explanation. See error summary
sheet item 9.

RAW SEQUENCE LISTING

DATE: 04/08/2002

PATENT APPLICATION: US/10/098,600

TIME: 12:59:53

Input Set : A:\EP.txt

Output Set: N:\CRF3\04082002\J098600.raw

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2158          115          120          125
2160 Thr Met Glu Asn Leu Gly Leu Ala Gln Asn Cys Thr Ile Ser Ile Gln
2161      -130          135          140
2163 Asp Tyr Glu Val Phe Arg Cys Glu Asp Ser Leu Asp Glu Arg Lys Ile
2164 145          150          155          160
2166 Lys Gly Val Ile Glu Leu Arg Lys Ser Leu Leu Ser Ala Leu Arg Thr
2167          165          170          175
2169 Tyr Glu Pro Tyr Gly Ser Leu Val Gln Gln Ile Arg Ile Leu Leu Leu
2170          180          185          190
2172 Gly Pro Ile Gly Ala Gly Lys Ser Ser Phe Phe Asn Ser Val Arg Ser
2173          195          200          205
2175 Val Phe Gln Gly His Val Thr His Gln Ala Leu Val Gly Thr Asn Thr
2176      210          215          220
2178 Thr Gly Ile Ser Glu Lys Tyr Arg Thr Tyr Ser Ile Arg Asp Gly Lys
2179 225          230          235          240
2181 Asp Gly Lys Tyr Leu Pro Phe Ile Leu Cys Asp Ser Leu Gly Leu Ser
2182          245          250          255
2184 Glu Lys Glu Gly Gly Leu Cys Met Asp Asp Ile Ser Tyr Ile Leu Asn
2185          260          265          270
2187 Gly Asn Ile Arg Asp Arg Tyr Gln Phe Asn Pro Met Glu Ser Ile Lys
2188          275          280          285
2190 Leu Asn His His Asp Tyr Ile Asp Ser Pro Ser Leu Lys Asp Arg Ile
2191          290          295          300
2193 His Cys Val Ala Phe Val Phe Asp Ala Ser Ser Ile Glu Tyr Phe Ser
2194 305          310          315          320
2196 Ser Gln Met Ile Val Lys Ile Lys Arg Ile Arg Arg Glu Leu Val Asn
2197          325          330          335
2199 Ala Gly Val Val His Val Ala Leu Leu Thr His Val Asp Ser Met Asp
2200          340          345          350
2202 Leu Ile Thr Lys Gly Asp Leu Ile Glu Ile Glu Arg Cys Val Pro Val
2203          355          360          365
2205 Arg Ser Lys Leu Glu Glu Val Gln Arg Lys Leu Gly Phe Ala Leu Ser
2206          370          375          380
2208 Asp Ile Ser Val Val Ser Asn Tyr Ser Ser Glu Trp Glu Leu Asp Pro
2209 385          390          395          400
2211 Val Lys Asp Val Leu Ile Leu Ser Ala Leu Arg Arg Met Leu Trp Ala
2212          405          410          415
2214 Ala Asp Asp Phe Leu Glu Asp Leu Pro Phe Glu Gln Ile Gly Asn Leu
2215          420          425          430
2217 Arg Glu Glu Ile Ile Asn Cys Ala Gln Gly Lys Lys
2218          435          440

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VERIFICATION SUMMARY

DATE: 04/08/2002

PATENT APPLICATION: US/10/098,600

TIME: 12:59:54

Input Set : A:\EP.txt

Output Set: N:\CRF3\04082002\J098600.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:560 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER
L:563 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:1673 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
M:332 Repeated in SeqNo=16
L:2035 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:32
L:2035 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:2148 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:33
L:2394 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:35
L:31 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (33) Counted (36)